Complete Summary

TITLE

Chronic kidney disease (CKD): percentage of calendar months during the 12 months reporting period in which patients aged 18 years and older with the diagnosis of advanced CKD (stage 4 or 5, not receiving RRT), receiving ESA therapy, have a hemoglobin less than 13 g/dL OR patients whose hemoglobin is greater than or equal to 13 g/dL have a documented plan of care.

SOURCE(S)

Renal Physicians Association, Physician Consortium for Performance Improvement®. Chronic kidney disease physician performance measurement set. Chicago (IL): American Medical Association; 2007 Oct. 32 p. [13 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of calendar months during the 12 months reporting period in which patients aged 18 years and older with the diagnosis of advanced chronic kidney disease (CKD) (stage 4 or 5, not receiving renal replacement therapy [RRT]), receiving erythropoiesis-stimulating agent (ESA) therapy, have a hemoglobin less than 13 g/dL OR patients whose hemoglobin is greater than or equal to 13 g/dL have a documented plan of care.

RATIONALE

The clinical recommendation regarding hemoglobin (Hb) levels for chronic kidney disease (CKD) patients receiving erythropoiesis-stimulating agent (ESA) therapy is

that Hb level should generally be in the range of 11.0 to 12.0 g/dL. Additionally, these patients should also have their Hb level checked at least monthly. Given that Hb levels vary for each patient due to numerous factors, it is necessary to monitor Hb level closely in order to make the individualized treatment decisions required in maintaining Hb level in the target range. There is no evidence of benefit from ESA therapy when Hb levels are maintained at greater than 13.0 g/dL. Maintaining Hb at higher levels may result in potential harm to the patient, as well as incur unjustified cost. Evidence linking increased risks for patients with CKD and higher Hb levels were for target Hb levels greater than 13.0 g/dL. The intention of this measure is not to suggest that the goal of ESA treatment is to reach an achieved Hb of 13.0 g/dL. Rather, as a patient safety measures, it is to realize that patients who reach Hb levels higher than 13.0 g/dL are at increased risk for adverse events, and that these elevated Hb levels need to be addressed by adjusting ESA dosage.*

*The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

The frequency of HB monitoring in patients treated with ESAs should be at least monthly. (National Kidney Foundation [NKF], 2006)

The HB target is the intended aim of ESA therapy for the individual patient with CKD. In clinical practice, achieved Hb results vary considerably from Hb target.

- Selection of the Hb target and selection of the Hb level at which ESA therapy is initiated in the individual patient should include consideration of potential benefits (including improvement in the quality of life and avoidance of transfusion) and potential harms (including the risk of life-threatening adverse events). (NKF, 2007)
- In dialysis and nondialysis patients with CKD receiving ESA therapy, the selected Hb target should generally be in the range of 11.0 to 12.0 g/dL. (NKF, 2007)
- In dialysis and nondialysis patients with CKD receiving ESA therapy, the Hb target should not be greater than 13.0 g/dL. (NKF, 2007)
- The initial ESA dose and the ESA dose adjustments should be determined by the patient's Hb level, the target Hb level, the observed rate of increase in Hb level, and clinical circumstances. (NKF, 2006)

ESA doses should be decreased, but not necessarily held, when a downward adjustment of Hb level is needed. (NKF, 2006)

PRIMARY CLINICAL COMPONENT

Chronic kidney disease (CKD); erythropoiesis-stimulating agent (ESA) therapy; hemoglobin

DENOMINATOR DESCRIPTION

Calendar months for all patients aged 18 years and older with the diagnosis of advanced chronic kidney disease (CKD) (stage 4 or 5, not receiving renal replacement therapy [RRT]), receiving erythropoiesis-stimulating agent (ESA) therapy

NUMERATOR DESCRIPTION

Number of calendar months during which patients' hemoglobin level is less than 13 g/dL OR patients whose hemoglobin level is greater than or equal to 13 g/dL and have a documented plan of care (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- (1) KDOQI clinical practice guidelines and clinical practice recommendations for anemia in chronic kidney disease. (2) 2007 update of hemoglobin target.

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement
National reporting

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Calendar months for all patients aged 18 years and older with the diagnosis of advanced chronic kidney disease (CKD) (stage 4 or 5, not receiving renal replacement therapy [RRT]), receiving erythropoiesis-stimulating agent (ESA) therapy

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions
Calendar months for all patients aged 18 years and older with the diagnosis of advanced chronic kidney disease (CKD) (stage 4 or 5, not receiving renal replacement therapy [RRT]), receiving erythropoiesis-stimulating agent (ESA) therapy

Exclusions
None

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter
Therapeutic Intervention

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
Number of calendar months during which patients' hemoglobin level is less than 13 g/dL OR patients whose hemoglobin level is greater than or equal to 13 g/dL and have a documented plan of care*

*A documented plan of care should include reducing the erythropoiesis-stimulating agent (ESA) dose and repeating hemoglobin at a specified future date.

Exclusions
None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Measure #4: plan of care -- elevated hemoglobin for patients receiving erythropoiesis-stimulating agents (ESA).

MEASURE COLLECTION

The Physician Consortium for Performance Improvement® Measurement Sets

MEASURE SET NAME

Chronic Kidney Disease Physician Performance Measurement Set

SUBMITTER

American Medical Association on behalf of the Renal Physicians Association and the Physician Consortium for Performance Improvement®

DEVELOPER

Physician Consortium for Performance Improvement®
Renal Physicians Association

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

William Haley, MD (*Co-Chair*); Bonnie McCafferty, MD, MSPH (*Co-Chair*); Todd Davis, MD; Barbara Fivush, MD; Richard S. Goldman, MD; John Hartman, MD; Richard Hellman, MD, FACP, FACE; Edward Jones, MD; Craig B. Langman, MD; Cathi Martin, RD; Charles McAllister, MD, MBA, FCAP; Paul Rockswold, MD, MPH; Sam J.W. Romeo, MD, MBA; Anton C. Schoolwerth, MD, FAHA; Lesley Stevens, MD; Joseph Vassalotti, MD; Candace Walworth, MD; Don Wesson, MD; David Witte, MD, PhD, FCAP; Jerry Yee, MD

Robert Blaser, Renal Physicians Association; Dale Singer, Renal Physicians Association

Phil Renner, MBA, National Committee for Quality Assurance

Susan Nedza, MD, MBA, FACEP, Centers for Medicare & Medicaid Services; Desurai Wilson, Centers for Medicare & Medicaid Services

Chris Izui, Health Plan Representative (BCBS)

Elvira Ryan, RN, The Joint Commission; Ann Watts, RN, The Joint Commission

Kendra Hanley, MS, CHE, American Medical Association; Erin O. Kaleba, MPH, American Medical Association; Karen S. Kmetik, PhD, American Medical Association

Rebecca A. Kresowik, Facilitator; Timothy F. Kresowik, MD, Facilitator

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

INCLUDED IN

Ambulatory Care Quality Alliance
Physician Quality Reporting Initiative

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2007 Oct

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

Renal Physicians Association, Physician Consortium for Performance Improvement®. Chronic kidney disease physician performance measurement set. Chicago (IL): American Medical Association; 2007 Oct. 32 p. [13 references]

MEASURE AVAILABILITY

The individual measure, "Measure #4: Plan of Care -- Elevated Hemoglobin for Patients Receiving Erythropoiesis-Stimulating Agents (ESA)," is published in the "Chronic Kidney Disease Physician Performance Measurement Set." This document and technical specifications are available in Portable Document Format (PDF) from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site: www.physicianconsortium.org.

For further information, please contact AMA staff by e-mail at cqi@ama-assn.org.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on March 27, 2008. The information was verified by the measure developer on June 11, 2008.

COPYRIGHT STATEMENT

Disclaimer

NQMC DISCLAIMER

The National Quality Measures Clearinghouse™ (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the NQMC Inclusion Criteria which may be found at http://www.qualitymeasures.ahrq.gov/about/inclusion.aspx.

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. The inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.

Date Modified: 11/3/2008